

## A New Species of the Genus *Platyspathius* Viereck (Hymenoptera, Braconidae, Doryctinae) from Korea

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**Abstract** A new species *Platyspathius hospitus* sp. nov. is described from Korea. Genus *Platyspathius* are recorded for the first time for East Palaearctic.

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**Key words** Taxonomy, Braconidae, *Platyspathius*, new species, Korea

### INTRODUCTION

*Platyspathius* Viereck is a rather small genus of the subfamily Doryctinae comprising 11 species from the Oriental and Afrotropical regions of the Old World (Nixon, 1943; Shenefelt and Marsh, 1976; Chao, 1978). *Spathiohormius filicornis* Enderlein and *S. sauteri* Watanabe (Shenefelt and Marsh, 1976) which have been included in this genus, belongs to the genus *Rhaconotus* Ruthe exactly. Recently an undetermined specimen (male) of this genus was collected in France (Shaw, 1999). In the present study, a new species of this genus is described below from Korea. It is the first record of *Platyspathius* Viereck in the East part of Palaearctic region.

The most species of Doryctinae are known as ectoparasites of the larvae of beetles from different families (more common—Scolytidae, Cerambycidae, Curculionidae and Buprestidae) (Belokobylskij, 1996). But the species of *Platyspathius* was reared from larvae of the family Bostrichidae (genera *Dinoderus* and *Sinoxylon*) (Shenefelt and Marsh, 1976).

The terms of wing venation are used as defined by Belokobylskij and Tobias (1998). The following abbreviation are used: POL—postocellar line; OOL—ocular-ocellar line; Od—maximum diameter of lateral ocellus; NIAST—National Institute of Agriculture Sciences and Technology (Suwon, Korea); ZISP—Zoological Institute, Russian Academy of Sciences (St. Petersburg, Russia).

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***Platyspathius hospitus* sp. nov.**

(Figs 1-11)

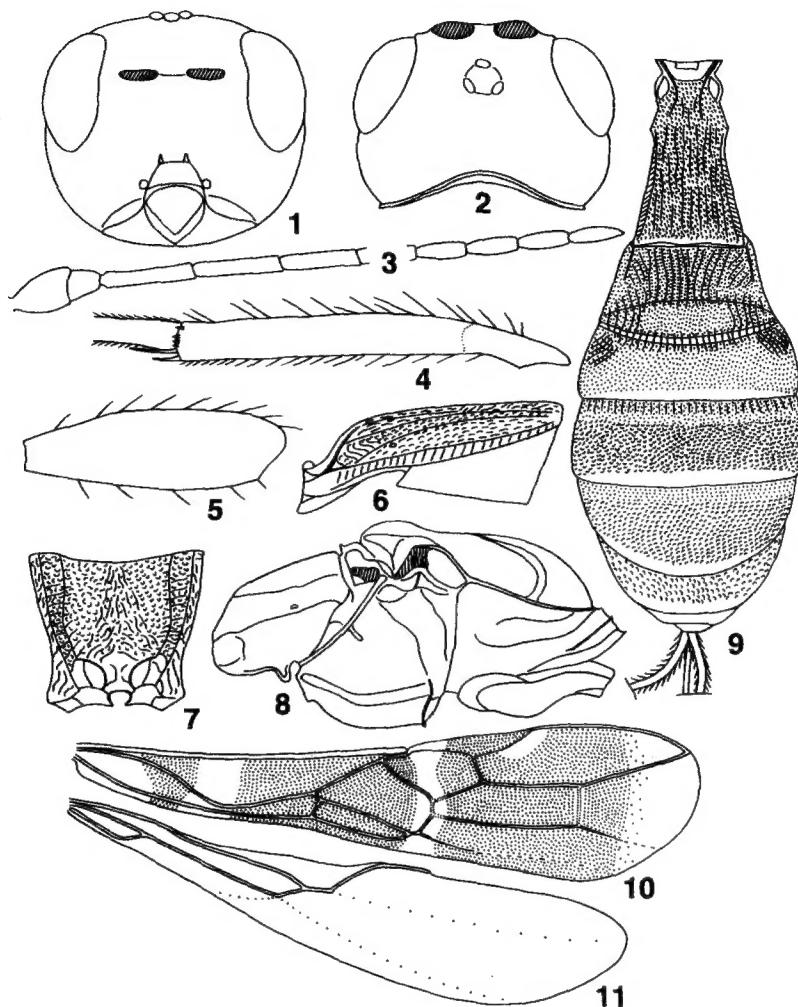
**Description.** Body length 3.6–3.8 mm; fore wing length 2.5 mm. Head width 1.5 times its median length. Temple weakly roundly narrowed; transverse diameter of eye 1.3–1.4 times length of temple. Ocelli small, almost in equilateral triangle; POL 1.1–1.2 times Od, 0.4 times OOL. Eye glabrous, 1.3 times as high as broad. Malar space height 0.6 times eye height and almost equal to basal width of mandible. Face width 1.1 times eye height and 1.3–1.4 times height of face and clypeus combined. Clypeal suture distinct. Hypoclypeal depression small and round, its width 0.6 times distance from edge of depression to eye. Occipital carina absent at short distance near mandible and not fused with hypostomal one. Antennae filiform, almost as long as body, densely setose, 28-segmented. Scapus 1.5–1.7 times as long as wide. First flagellar segment 4.5–5 times as long as its apical width, 0.9–1 times as long as second segment. Penultimate segment almost 3 times as long as wide, 0.6 times as long as first segment, 0.9 times as long as apical segment, which is pointed apically.

**Mesosoma.** Length of mesosoma almost twice its height. Pronotal keel fine, but distinct and complete, situated on middle of pronotal neck. Pronotal lateral depression narrow, rather shallow, finely crenulate with granulation. Mesoscutum weakly, uniformly and roundly raised above pronotum. Notauli deep, but shallow in posterior 1/3, complete, crenulate. Prescutellar depression with 3 carinae, granulate, but partly smooth, 0.3–0.35 times as long as convex scutellum. Sternauli shallow, weakly curved, crenulate, running along almost all length of ventral part of mesopleura. Subalar depression shallow, rather narrow, striae –coriaceous. Metanotum with small median pointed posterior tooth (lateral view).

**Wing.** Fore wing 4 times as long as wide. Radial vein arising almost from middle of pterostigma. Radial cell unshortened; metacarpus 1.2–1.3 times as long as pterostigma. Second radial abscissa 3.5–4 times first abscissa and forming weakly obtuse corner with it, 0.8 times third abscissa, 1.5–2 times first radiomedial vein. First medial abscissa weakly S-curved. Second radiomedial cell weakly widened distally, its length about 3.5 times maximum width, 1.5–1.6 times length of wide brachial cell. Nervulus declivous. Distance from nervulus to basal vein 0.3 times nervulus length. Parallel vein interstitial. Mediocubital vein strongly curved to anal vein in distal half. Brachial cell apically gently closed at level of recurrent vein. Hind wing 4.7–5 times as long as wide. First abscissa of costal vein 0.6 times as long as second abscissa. First abscissa of mediocubital vein 0.7 times as long as second abscissa. Recurrent vein strongly curved toward base, unsclerotized, interstitial.

**Legs.** Hind coxa with basoventral tooth. Hind femur about 3 times as long as wide. Hind tibia with 4–5 apical spines on its outside margin. Hind tarsus as long as hind tibia. Hind basitarsus 0.6–0.7 times as long as second–fifth segments combined; second tarsal segment 0.5 times as long as basitarsus, 1.1 times as long as fifth segment (without pretarsus).

**Metasoma.** Petiole distinctly curved in basal 1/5, then almost straight (lateral view), widened from base to apex (dorsal view), with small spiracular tubercles in basal 1/3–1/4. Acrosternite short, about 0.35 times as long as first tergite. Length of petiole 1.6–1.7 times its apical width, 1.3–1.4 times length of propodeum; apical width of petiole almost twice its minimum width. Second–fifth tergites with separate laterotergites. Second tergite with shallow and weakly curved transverse furrow submedially, separated



**Figs 1-11.** *Platyspathius hospitus* sp. nov.: 1, head, frontal view; 2, head, dorsal view; 3, basal and apical segments of antenna; 4, hind tibia; 5, hind femur; 6, petiole, lateral view; 7, propodeum; 8, mesosoma; 9, metasoma; 10, fore wing; 11, hind wing.

rather narrow oval area; median length of area 0.7–0.9 times length of rest tergite. Median length of second tergite 0.7–0.8 times its basal width, 1.3–1.5 times length of third tergite. Second suture rather deep, but shallow laterally, crenulate. Ovipositor sheath 0.8–0.9 times as long as metasoma, 2.4–2.8 times as long as petiole, 1.15–1.25 times as long as mesosoma, 0.6 times as long as fore wing.

Sculpture and pubescence. Vertex very finely aciculate, coriaceous partly. Frons granulate–coriaceous. Face granulate, finely granulate medially, coriaceous below. Temple coriaceous, finely aciculate upper. Mesoscutum and scutellum coriaceous, lobes near notaui without rugae, mesoscutum medioposteriorly with 2 convergent striae and narrowly rugulose. Mesopleura finely coriaceous, more strongly coriaceous below sternaui. Metapleura very finely coriaceous, rugulose posteriorly. Propodeum rugulose–reticulate,

distinctly coriaceous in basolateral half, areas indistinct, but present 2 long lateral carinae, median carina indistinct. Hind coxae granulate-coriaceous. Hind femur finely coriaceous. Petiole finely, but distinctly striate, with dense fine reticulation between striae. Second tergite irregularly distinctly striate, with dense granulation between striae, apical area granulate only. Third-sixth tergites densely granulate-coriaceous, apical tergites finely sculptured. Mesoscutum with sparse short semierect hairs along notauli and anteriorly. Hairs on dorsal surface of hind tibia rather sparse, short, semierect, their length 0.6–0.9 times maximum width of tibia.

**Colour.** Head, mesosoma and petiole light reddish brown, rest metasomal tergite black. Antenna brownish yellow, finely darkened toward apex. Palpi dark brown. Legs light reddish brown, all or only hind tibiae darker, hind tibia light reddish brown basally, all tarsi brownish yellow. Ovipositor sheath black. Wings distinctly infuscate, with subhyaline narrow stripes basally, in basal 1/5, under base of pterostigma and apically. Pterostigma dark reddish brown, pale yellow in basal 1/3.

**Male.** Unknown.

**Types.** Holotype: [NIAST] ♀, Korea, Mt. Yeohang, Gyeongnam, Haman, 25. VII.–6. VIII. 1993, Deok-Seo Ku, Malaise trap. Paratype: [ZISP] 1 ♀, "Korea, Mt. Cheonhwang, Miryang, Gyeongnam, 25. VI. 1987, Deok-Seo Ku, Malaise trap.

**Discussion.** This species is closely related to *P. clemene* Nixon from Africa (Nixon, 1943), because of notauli complete, mesonotum striate-reticulate medioposteriorly, and crenulation of the second suture distinct, but differ in the petiole shorter, second tergite mostly striate and with apical oval area, prescutellar depression longer, and first flagellar segment shorter than second one.

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**韓國產 *Platyspathius* Viereck屬  
(벌목, 고치벌과, 중국고치벌亞科)의 1新種**

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韓國產 *Platyspathius* Viereck屬 (벌목, 고치벌과, 중국고치벌亞科)의 1新種을 기재 하였다. *Platyspathius* 屬은 동구북구 지역에서 처음으로 기록된다.

검색어 : 분류 고치벌과, *Platyspathius*, 신종, 한국

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